easier to perform, in clinics where the transport of slides is necessary and delays may occur, or where a chlamydial diagnostic service is being established de novo, slide tests may have a role.

Yours faithfully,
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TO THE EDITOR, *Genitourinary Medicine*

Control of hepatitis B and human T lymphotropic virus type III (HTLV-III) in homosexuals in Sheffield

Sir,
The serious psychosocial impact of hepatitis B carriage can now be reduced by the cost effective immunisation of high risk groups, such as male homosexuals.[1] Studies conducted in London clinics for sexually transmitted disease (STD) during the 1970s, however, indicated that most homosexual and bisexual men had already been exposed to hepatitis B virus.

We have compared the prevalence of serological markers for hepatitis B infections, by using radioimmunoassay tests for hepatitis B surface antigen (HBsAg) and antibodies to HBsAg in this high risk population attending provincial departments of genitourinary medicine from September 1981 to August 1984 (Leeds) and from January 1984 to June 1985 (Sheffield). The table shows the results.

TABLE *Incidence of hepatitis B surface antigens (HBsAg) or antibodies to HBsAg (anti-HBs) in 815 homosexual and bisexual men in Leeds and Sheffield*

Clinic	No of men studied	No (%) with HBsAg or anti-HBs
Leeds	522	162 (31)*
Sheffield	293	47 (16)*

* p=0·001.

In contrast to the 56·5% prevalence at a London clinic,[2] both our study populations had an appreciably lower prevalence. It is postulated that these findings largely related to differences in sexual behaviour, though other factors, such as ethnic background or associated intravenous drug abuse, may also play a part.

Preliminary studies in Sheffield also show a lower prevalence of HTLV-III seropositivity, currently 3% of homosexual and bisexual men, compared with over 30% reported in those attending London clinics.[3] The persisting relatively low prevalence of hepatitis B infection in our at risk population whose methods of transmission are similar and infectivity higher than those for HTLV-III provides some encouragement that the spread of HTLV-III related disease among provincial homosexual men may be much lower than that witnessed in London.

We suggest that one method of inhibiting the future spread of these two potentially serious viral sexually transmitted diseases would be to combine screening with an active vaccination programme against hepatitis B and individual counselling about the risk of acquiring and transmitting HTLV-III. Such a programme would encourage those at high risk to attend clinics and help promote a cost effective approach to the prevention of the long term sequelae of these potentially serious viral infections.

Yours faithfully,
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TO THE EDITOR, *Genitourinary Medicine*

Antibodies to cytomegalovirus in heterosexual and homosexual men in Cardiff

Sir,
Cytomegalovirus (CMV) antibody in women of childbearing age varies from 40% to 70% in most temperate climates.[1] In the United Kingdom, most of Western Europe, and North America 50% to 60% of the population will eventually acquire the infection; about one third in childhood and the rest between the ages of 15 and 35 years.[2]

Blood samples were taken from 120 homosexual and 133 heterosexual men. The CMV complement fixation was measured by the technique of Bradstreet and Taylor.[3] The table shows the results. They compare with a previous study of homosexuals and heterosexuals attending the Middlesex Hospital, London, which found antibody to CMV at a titre of 1/4 or more in 92% of homosexuals, 80% of bisexuals, and 56% of heterosexuals.[4] In that study, using a series of log linear models, sexual orientation was shown to be the most important determinant of antibody to CMV in the population.[4]

TABLE *Antibody to cytomegalovirus in 120 homosexual and 133 heterosexual men*

	No (%) with titres of: < 1/4	> 1/4
Homosexuals	44 (37)	76 (63)
Heterosexuals	92 (69)	41 (31)

Coutinho *et al* noted in a study in the Netherlands that of 710 homosexuals, 501 (70·6%) had complement fixing antibodies to CMV on entry to the study.[5] During follow up (maximum 23 months) 69 CMV infections were found. Of these, 50 were primary infections among 209 seronegative men (attack rate 27·3%), and 19 were recurrent infections among 501 seropositive men (attack rate 6·2%).

Our study shows a prevalence of CMV antibodies in homosexuals fairly close to that of Coutinho *et al*, who used the same cut off titre of 1/8. The higher incidence in the Middlesex Hospital study may be partly explained by a lower cut off titre of 1/4, but cannot account for the difference between heterosexuals (London 56%, Cardiff 31%). The difference between homosexuals and heterosexuals is more clearly polarised in the